

Eastern Electric Apparatus Repair Co.)	Departmental
Kennebec County)	Findings of Fact and Order
Augusta, Maine)	Air Emission License
A-217-71-E-R)	

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Eastern Electric Apparatus Repair Co. of Augusta, Maine has applied to renew their Air Emission License permitting the operation of emission sources associated with their electrical apparatus repair and servicing facility.

B. Emission Equipment

Eastern Electric is authorized to operate the following equipment:

Incinerators

<u>Equipment</u>	<u>Max. Design Feed Rate</u>	<u>Primary Chamber</u>	<u>Waste Type</u>	<u>Pollution Controls</u>	<u>Stack #</u>
Class VII Incinerator #1	52 lb/hr	1.8 MMBtu/hr LP Gas	6	afterburner	1
Class VII Incinerator #2	20 lb/hr	0.225 MMBtu/hr LP Gas	6	afterburner	2

Process Equipment

<u>Equipment</u>	<u>Pollutants Generated</u>	<u>Pollution Control Equipment</u>	<u>Stack #</u>
Bake Oven	VOC	none	3
Electric Oven	VOC	none	4
Steam Cleaner	-	-	8
Lift Parts Washer	VOC	none	9
Paint Booth	PM, VOC	none	10
Stripping Booth	PM	none	11
Varnish Dipper	VOC	none	12
Vacuum Pressure Impregnation (VPI)	VOC	none	13
Safety Clean Parts Washer	VOC	none	14

C. Application Classification

The application for Eastern Electric does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas. BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Incinerator #1

A summary of the BPT analysis for Incinerator #1(1.8 MMBtu/hr) is the following:

1. The feed rate of Incinerator #1 shall not exceed the designed maximum at 52 lb/hr. Auxiliary fuel input to the primary chamber shall not exceed 1.8 MMBtu/hr firing L.P. Gas.
2. Incinerator #1 shall not operate without the afterburner being in full operation.
3. Incinerator #1 shall not exceed 1,500 hr/yr of operation. (note: The permitted hours of operation has been increased from 1,000 to 1,500 hr/yr to allow for growth.)
4. Chapter 104 regulates PM emission limits, however 0.10 gr/dscf is more stringent and shall be used. The PM₁₀ limits are derived from the PM limits.
5. SO₂, NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
6. Visible emissions from Incinerator #1 shall not exceed 10% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a continuous 3 hour period.

C. Incinerator #2

A summary of the BPT analysis for Incinerator #2(0.225 MMBtu/hr) is the following:

1. The feed rate of Incinerator #2 shall not exceed the designed maximum at 20 lb/hr. Auxiliary fuel input to the primary chamber shall not exceed 0.225 MMBtu/hr firing L.P. Gas.
2. Incinerator #2 shall not operate without the afterburner being in full operation.
3. Incinerator #2 shall not exceed 1,600 hr/yr of operation. (note: The permitted hours of operation has been increased from 1,375 to 1,600 hr/yr to allow for growth.)
4. Chapter 104 regulates PM emission limits, however 0.10 gr/dscf is more stringent and shall be used. The PM₁₀ limits are derived from the PM limits.
5. SO₂, NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
6. Visible emissions from Incinerator #2 shall not exceed 10% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a continuous 3 hour period.

D. Process Emissions

1. Varnish Dip, Vacuum Pressure Impregnation (VPI), Bake Oven and Spray Booth

Eastern Electric utilizes the varnish dip, VPI system, and bake oven as part of their motor refurbishing process and a spray booth for spray painting motors and electrical equipment. An estimated 840 gal/year of xylene, 125 gal/year of paint, and 500 gal/yr of resin is used in these operations. Eastern Electric shall be limited to a maximum of 3.04 ton/year of VOC emissions from the use of xylene. Assuming 2.3 lb/gal of VOCs are released by the resin, Eastern Electric shall be limited to a maximum of 0.58 ton/yr of VOCs from resin.

2. Electric Oven

A small electric oven is used for curing of small motor parts. This unit is operated approximately 20 hr/week with small quantities of VOC emissions from varnish applied to the part. There is no afterburner on this equipment but emissions are considered to be negligible.

3. Steam Cleaner

A steam cleaner is used to clean motors as needed. This unit is self-enclosed and uses propane to generate the required steam. Emissions from this unit are vented through their own stack and are negligible, therefore this unit is noted for inventory purposes only.

4. Other Emission Sources

A. Eastern Electric operates two parts cleaners used for degreasing using mineral spirits. Approximately 240 gal/year are consumed of Safety Kleen Solvent which is recycled by Safety-Kleen. Eastern Electric shall be limited to 0.5 tons/year of VOC emissions from their cleaning/degreasing process.

B. Eastern Electric operates a stripping booth in which air is used to remove insulation from motors. No solvent is used and therefore no VOCs are given off in this process. PM emissions are small and contained within this work area.

E. Annual Emission Restrictions

Eastern Electric shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Allowable Annual Emission for the Facility
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Tons/Year</u>
PM	0.19
PM ₁₀	0.19
SO ₂	0.01
NO _x	0.30
CO	0.04
VOC	4.13

III.AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling and monitoring are not required for a renewal if the total emissions of any pollutant released do not exceed the following:

<u>Pollutant</u>	<u>Tons/Year</u>
PM	50
PM ₁₀	25
SO ₂	50
NO _x	100
CO	250

Based on the above total facility emissions, Eastern Electric is below the emissions level required for modeling and monitoring.

**Eastern Electric Apparatus Co.
Kennebec County
Augusta, Maine
A-217-71-E-R**

)
)
)
6

**Departmental
Findings of Fact and Order
Air Emission License**

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-217-71-E-R subject to the following conditions:

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions.
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. § 353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.

- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - b. pursuant to any other requirement of this license to perform stack testing.
 - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
 - (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances

- representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
- (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.
- (16) Incinerators #1 & #2
- A. The Class VII incinerators shall not exceed the maximum design feed rates of 52 lb/hr for Incinerator #1 and 20 lb/hr for Incinerator #2. Auxiliary fuel input to the primary chamber shall not exceed 1.8 MMBtu/hr for Incinerator #1 and 0.225 MMBtu/hr for Incinerator #2 both firing L.P. Gas.
 - B. A log shall be maintained recording the weight of waste charged for each unit.

- C. The licensee shall operate the incinerator such that combustion gases pass through the afterburner which shall be operating at all times the incinerator is in use.
- D. Incinerator #1 shall not exceed 1,500 hr/year of operation. Incinerator #2 shall not exceed 1,600 hr/year of operation. A log shall be kept recording the operation time of each unit.
- E. Visible emissions from Incinerator #1 & #2 shall not exceed 10% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a continuous 3 hour period.
- F. Emissions shall not exceed the following:

Equipment		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Incinerator #1	gr/dscf	0.10	0.10	-	-	-	-
	lb/hr	0.225	0.225	0.01	0.27	0.04	0.01
Incinerator #2	gr/dscf	0.10	0.10	-	-	-	-
	lb/hr	0.03	0.03	0.01	0.03	0.01	0.01

(17) Process Emissions

A. Varnish Dip, Vacuum Pressure Impregnation (VPI), Bake Oven, and Paint Booth

Eastern Electric shall be limited to the use of xylene in the varnish dip, curing process, and paint booth which does not exceed a total VOC emission of 3.04 ton/year and resin which does not exceed a total VOC emission of 0.58 ton/year.

B. Parts Cleaner

VOC emissions from the parts cleaning/degreasing process shall not exceed 0.5 ton/year. Per MEDEP Chapter 130, Eastern Electric shall label the parts washers with operational standards, equip the washer with cover if vapor pressure > 15 mmHG at 100°F, close cover when not in use, drain parts for 15 seconds or longer, shall not degrease porous material, keep drafts < 40 m/minute, repair leaks, and keep records of solvent added and removed.

C. A log documenting the materials used in the Varnish Dip, VPI, Bake Oven, Paint Booth, and Parts Cleaning processes shall be kept for a minimum of 6 years and submitted to the Department upon request.

Eastern Electric Apparatus Co.
Kennebec County
Augusta, Maine
A-217-71-E-R

)
)
)
10

Departmental
Findings of Fact and Order
Air Emission License

(18) Facility Emissions

Facility emissions shall be limited to the following, based on a 12 month rolling total:

Pollutant	Tons/yr
PM	0.19
PM ₁₀	0.19
SO ₂	0.01
NO _x	0.23
CO	0.03
VOC	4.13

(19) The term of this Order shall be for five (5) years from the signature below.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 1999.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: September 24, 1999

Date of application acceptance: September 28, 1999

Date filed with the Board of Environmental Protection: _____

This Order prepared by Lynn Ross, Bureau of Air Quality